

Patent Abstracts of Japan

PUBLICATION NUMBER : 60114511
 PUBLICATION DATE : 21-06-85

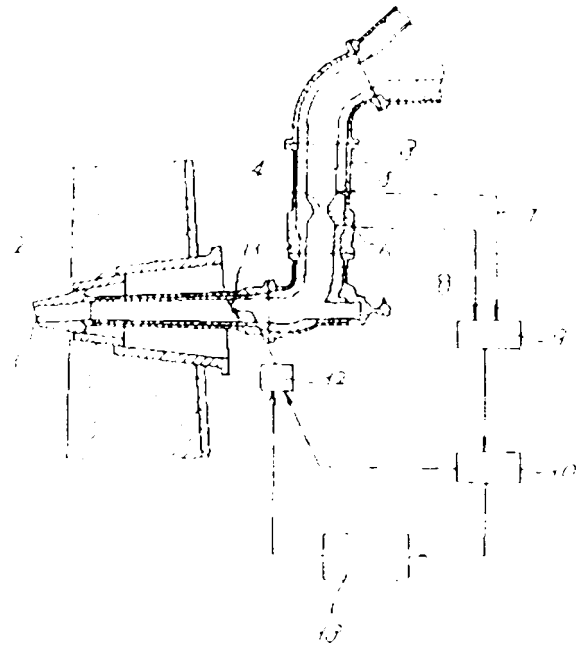
 APPLICATION DATE : 25-11-83
 APPLICATION NUMBER : 58222973

 APPLICANT : SUMITOMO METAL IND LTD;

 INVENTOR : YONETANI AKIYOSHI;

 INT.CL. : C21B 5/00

 TITLE : METHOD FOR CONTROLLING FLOW
 RATE OF BLAST FURNACE



ABSTRACT : PURPOSE: To make the blasting rate in each tuyere uniform and to stabilize the condition of a blast furnace by measuring the quantity of the hot air to be blown through the plural tuyeres of the blast furnace and adjusting the opening degree of the heat resistant valves provided in the tuyeres from the results of the measurement.

CONSTITUTION: A difference is produced in the pressure of hot air in each tuyere by the difference in the distance from a blast pipe to an annular hot air pipe according to the position where a blast branch 3 connected to a tuyere 1 is connected to the annular main pipe for hot air in the stage of blowing the hot air through the plural tuyeres provided around the lower part of a blast furnace into the furnace. The blowing rate of the hot air through each furnace varies with the pressure difference thus making the furnace condition unstable. Such pressure of hot air is measured by a differential pressure gage 9 in a Venturi part 4 of the branch 3 and is inputted to a flowmeter 10 or is compared with a standard pressure in a computer 13. The opening degree of a heat resistant ceramic valve 11 provided in the tuyere is adjusted, by which the whole hot air pressure of the plural tuyeres is controlled uniformly and the furnace condition is stabilized.

COPYRIGHT: (C)1985,JPO&Japio